COMPARISON BETWEEN DISCRIMINANT ANALYSIS AND LOGISTIC REGRESSION ANALYSIS:AN APPLICATION ON CAESAREAN BIRTHS AND NATURAL BIRTHS DATA

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Abstract

The Discriminant Analysis (DA) and the Logistic Regression Analysis (LRA) are two statistical methods used for analyzing data and predicting group membership from a set of predictors.Many applications have been done in this area such as the recent works of [1,2]. In [3] Shaheen focused through application on Leukemia data for the comparison between three forms for classification data belongs two groups when the response variable has two categories only.In this paper we shall apply both (DA) and (LRA) for the caesarean births and natural births data using stepwise method.We also make a comparison between the two analysis and then we choose the best one for classifying the type of birth depending on the results of the analysis.

Keywords: Discriminant Analysis, Logistic Regression Analysis, Caesarean Births

References

- E. Zandkarimi and others, References comparison and discriminant analysis in identifying the determinants of type 2 diabetes among prediabetes of Kermanshah rural areas, Journal of Kermanshah university of medical sciences 17 (2013) 300-308.
- [2] A. Elhabil and M. Eljazzar, A comparative study between linear discriminant analysis and multinomial logistic regression, An-Najah university journal research 28 (2014) 1528-1548.
- [3] H. I. Shaheen, Comparison between some of linear classification models with practical application, Journal of economic and management 20 (2014) 394-410.

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